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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/588,861

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Erkki Soini

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1995

32954

7590

08/07/2009

JAMES C. LYDON

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SUITE 100

ALEXANDRIA, VA 22314

EXAMINER

FRITCHMAN, REBECCA M

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/588,861	<b>Applicant(s)</b> SOINI ET AL.	
	<b>Examiner</b> REBECCA FRITCHMAN	<b>Art Unit</b> 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 July 1009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Detailed Action  
Summary***

This is the Non-Final Office action based on 10/588861 application attorneys remarks filed on 07/17/2009.

Applicant's election with traverse of Claims 1-12 in the reply filed on 07/17/2009 is acknowledged. The traversal is on the ground(s) that groups I, II, & III all relate to a single general inventive concept. More specifically, Groups I-III share a special technical feature in the quantification of clinical chemistry analyte, defined as excluding analytes measured using bioaffinity assays in which the analyte is quantified by two-photon excited fluorescence(TPE). In this case the common technical feature is not special. Examiner agrees with applicants argument with respect to MELOTA, however in leiu of SOINI et al. in US 6342397 the restriction is maintained due to the fact that SOINI et al. teach of a biospecific (bioaffinity) assay which uses two-photon excitation (abstract).

The requirement is still deemed proper and is therefore made FINAL.

Claims 1-12 are pending and have been fully considered.

***Claim Rejections - 35 USC § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**1. Claims 1-10, & 12 are rejected under 35 U.S.C. 102(b) as being anticipated by SOINI et al. in US 6342397.**

With respect to Claims 1,2, & 8, SOINI et al. teach of a homogeneous biospecific assay for an analyte in a solution or in a suspension in which the biospecific reagent competitively binding an analyte and a ligand labeled with a fluorescent molecule is reacted with and bound to a solid phase and in which the free labeled ligand is excited with two-photon excitation by focusing the laser-beam suitable for two-photon excitation into the sample volume and the concentration of the analyte is calculated based upon the photo emission contributed by the free labeled ligand(abstract).

With respect to Claim 3, SOINI et al. teach of measuring the reaction kinetically (column 7, line 55-column 8, line 15).

With respect to Claim 4, SOINI et al. teach of making an end point measurement (column 7, line 55-column 8, line 15).

With respect to Claims 5, 6, & 11, SOINI et al. teach of using the method for screening samples and quantifying them as positive or negative for (the method is repeated for different sample to screen them(column 7, lines 48-53). SOINI et al. also teach of using the fluorometric device for the detection of the analyte concentration in which is a protein, antibody, or a nucleotide (abstract, & column 1, lines 17-31).

With respect to Claims 7 & 10, SOINI et al. teach of the analyte being protein (column 1, lines 17-31).

With respect to Claim 12, SOINI et al. teach of determining the concentration of the analyte (quantification of the bioaffinity analytes) (abstract).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**2. Claim 9 is rejected under 35 U.S.C. 103(a) as being obvious over SOINI et al. in US 6342397.**

With respect to Claim 9, SOINI et al. do not specifically teach of the parameters used for the laser operation. SOINI et al., however does teach that such parameters are optimizable. Specifically, SOINI et al. teach that it is possible to compensate the signal reductions by increasing the average power of the laser correspondingly. The most optimal way to increase the average power is to increase the laser pulse rate (column 3, lines 55-column 4, line 9).

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to REBECCA FRITCHMAN whose telephone number is (571)270-5542. The examiner can normally be reached on Monday- Friday 7:30-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim, Vickie can be reached on 571-272-0579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Krishnan S Menon/  
Primary Examiner, Art Unit 1797

R.F.